

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1-28. (Canceled)
29. (new) A method for treating a beta-globin producing cell comprising:
providing at least one beta-globin producing cell;
providing a vector encoding ferritin-H;
inserting the vector encoding ferritin-H into the at least one beta
globin producing cell, whereby ferritin-H is produced in the cell
and represses production of beta-globin proteins in the cell.
30. (new) The method of claim 29 wherein the step of inserting the vector
encoding ferritin-H into the at least one beta-globin producing cell
comprises transfecting the at least one beta-globin producing cell with
the vector encoding ferritin-H.
31. (new) The method of claim 30 wherein the transfection occurs *ex vivo*.
32. (new) The method of claim 31 further comprising subsequently
transplanting the globin-producing cell into bone.
33. (new) The method of claim 29 wherein the ferritin-H binds to the
promoter region of a beta-globin gene within the beta-globin

producing cell.

34. (new) The method of claim 33 wherein the ferritin-H binds to a human beta-globin gene at -148 to -153 bp from the transcription start site.
35. (new) The method of claim 29 wherein such repression of beta-globin production results in increased production of gamma-globin proteins in the cell.
36. (new) A pharmaceutical composition comprising:
an isolated gene encoding ferritin-H; and
a suitable transfection vector,
wherein the composition is provided in a pharmaceutical formulation
for injection.